

6. A device according to claim 1, wherein said membrane filter comprises a membrane made of one or more materials selected from polymeric materials, ceramic materials, and metals.

cont  
A1

7. A device according to claim 1, wherein said filter unit further comprises a coarse screen unit for precleaning the dirty solution before it enters the membrane filter.

9. A device according to claim 7, wherein said coarse screen unit comprises multiple screens arranged in a sandwich structure.

A2

10. A device according to claim 1, further comprising a pumping means for pumping clean solution from the clean solution tank in backflow through the filter unit.

11  
12  
13  
14  
15  
16  
17  
18  
19  
20

14. A device in combination with a filtering station according to claim 12, wherein said membrane filter comprises a membrane packed in a flat, spiral wound or tubular configuration, preferably a tubular or hollow fibre type configuration.

15. A device in combination with a filtering station according to claim 12, wherein said membrane filter comprises a membrane having a pore size between 10 - 10,000 kD.

16. A device in combination with a filtering station according to claim 12, wherein said membrane filter comprises a membrane having a pore size between 0.001 - 5  $\mu\text{m}$ .

A3

17. A device in combination with a filtering station according to claim 12, wherein said membrane filter comprises a membrane made of one or more materials selected from polymeric materials, ceramic materials, and metals.

18. A device in combination with a filtering station according to claim 12, wherein said filter unit further comprises a coarse screen unit for precleaning the dirty solution before it enters the membrane filter.

20. A device in combination with a filtering station according to claim 18, wherein said coarse screen unit comprises multiple screens arranged in a sandwich structure.

21. A device in combination with a filtering station according to claim 1, further comprising a pumping means for pumping clean solution from the clean solution tank in backflow through the filter unit.

25. A process according to claim 23, wherein said membrane filter comprises a membrane packed in a flat, spiral wound or tubular configuration, preferably a tubular or hollow fibre type configuration.

26. A process according to claim 23, wherein said membrane filter comprises a membrane having a pore size between 10 - 10,000 kD.

27. A process according to claim 23, wherein said membrane filter comprises a membrane having a pore size between 0.001 - 5  $\mu\text{m}$ .

28. A process according to claim 23, wherein said membrane filter comprises a membrane made of one or more materials selected from polymeric materials, ceramic materials, and metals.

29. A process according to claim 23, wherein said filter unit further comprises a coarse screen unit for precleaning the dirty solution before it enters the membrane filter.

31. A process according to claim 29, wherein said coarse screen unit comprises multiple screens arranged in a sandwich structure.

32. A process according to claim 23, further comprising at least one step of pumping clean solution from the clean solution tank in backflow through the filter unit for cleaning said filter unit.

34. A process according to claim 32, wherein each step of pumping clean solution from the clean solution tank in backflow through the filter unit has a duration of from 0.5 to 10 seconds, preferably 1 to 3 seconds.

36. A process according to claim 32, wherein the back-flush procedure of pumping clean solution from the clean solution tank in backflow through the filter unit is controlled by an automatic control unit.

38. A process according to claim 23, wherein the solution is a detergent solution having a detergent concentration in the range 0.001 - 25 % by weight.

38. A process according to claim 23, wherein the solution is a detergent solution having a detergent concentration in the range 0.001 - 25 % by weight.